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| APPLICATION NO.               | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|-------------------------------|------------------|----------------------|-------------------------|-----------------|
| 10/772,467                    | 02/06/2004       | Edwin Southern       | 2004-0200               | 1112            |
| 513 75                        | 90 10/11/2006    | •                    | EXAMINER                |                 |
|                               | H, LIND & PONACI | SKIBINSKY, ANNA      |                         |                 |
| 2033 K STREET N. W. SUITE 800 |                  | ART UNIT             | PAPER NUMBER            |                 |
| WASHINGTON, DC 20006-1021     |                  |                      | 1631                    | · .             |
|                               |                  |                      | DATE MAILED: 10/11/2006 |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  | 10/772,467  | SOUTHERN, EDWIN  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | Anna Skibinsky  | 1631   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   |   |  |  |  |  |  |
| ,  | , <del>,</del>  |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>17-85</u> is/are pending in the application.   |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |
| 6) Claim(s) is/are rejected.   |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  | election requirement  |  |  |  |  |  |
| 8) Claim(s) <u>17-85</u> are subject to restriction and/or election requirement.   |   |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |  |  |  |  |
|  | ammer. Note the attached office   | 7,00011 01 101111 1 1 0 102.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| <ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
|  |   |  |  |  |  |  |
|  |   |  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date.  |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)   | 5) Notice of Informal F   |  |  |  |  |  |
| Paper No(s)/Mail Date  | 6) Other:   |  |  |  |  |  |

## **DETAILED ACTION**

## Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 17-27, 37-41, and 46-63 are drawn to an array with at least two defined cells with oligonucleotides attached, classified in class 435, subclass 283.1.
- II. Claims 28-36, 64-76, drawn to a method of making an array of oligonucleotides attached at different known locations, classified in class 702, subclass 19.
- III. Claims 42-45, drawn to a method for analyzing a polynucleotide by producing a labeled nucleic acid and applying the nucleic acid to an array, classified in class 702, subclass 19.
- IV. Claim 77, drawn to a method of making oligonucleotides by applying a mask, classified in class 702, subclass 19.
- V. Claims 78 and 79, drawn to a method of comparing polynucleotide sequences under hybridizing conditions, classified in class 435, subclass 91.2.
- VI. Claims 80-81, drawn to a method for determining the sequence of a polynucleotide by detecting oligonucleotide probes to which polynucleotides hybridize, classified in class 435, subclass 6.
- VII. Claims 82-85, drawn to a kit for analyzing a polynucleotide, classified in class 435, subclass 455.

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The inventions are independent or distinct, each from the other because:

Inventions of Groups I and VII and Groups II, III, IV, V, and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case Groups I and VII are an array of oligonucleotides and a kit while Groups II, III, IV, V, and VI are methods of analyzing an array of polynucleotides.

Inventions I and VII are directed to related apparatus. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Group I is an apparatus with a support, porous material, array of oligonucleotides wherein the array comprises at least two defined cells but where oligonucleotides are not specified to be at known locations while Group VII is not. Group VII is a kit for analyzing a polynucleotide while Groups I is not.

Inventions II-VI are directed to related methods. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can

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have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Group II is a method of a method of making an array of oligonucleotides attached at different known locations while Groups III-VI are not. Group III is a method for analyzing a polynucleotide by producing a labeled nucleic acid and applying the nucleic acid to an array while Groups II and IV-VI are not. Group IV is a method of making oligonucleotides by applying a mask while Goups II-III and V-VI are not. Group V is a method of comparing polynucleotide sequences under hybridizing conditions while Groups II-IV and VI-VI are not. Group VI a method for determining the sequence of a polynucleotide by detecting oligonucleotide probes to which polynucleotides hybridize while Group II-V are not.

For the reasons listed above, Groups I-VII warrant restriction as they are distinct. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

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Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Skibinsky whose telephone number is (571) 272-4373. The examiner can normally be reached on 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anna Skibinsky, PhD

ANDREW WANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600